

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte FRITZ RUPFLIN

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Appeal No. 1999-2542  
Application 08/832,654

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HEARD

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Before COHEN, MCQUADE, and GONZALES, Administrative Patent Judges.

COHEN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 4 through 6 and 8 through 10, as amended subsequent to that rejection. These claims constitute all of the claims

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remaining in the application.

Appellant's invention pertains to a connector rod for a loom. An understanding of the invention can be derived from a reading of exemplary claim 4, a copy of which appears in "APPENDIX: A" appended to the main brief (Paper No. 16).

As evidence of obviousness, the examiner has applied the documents listed below:

Nicholas 1937	2,096,335	Oct. 19,
Vinciguerra 1988	4,770,584	Sep. 13,
Winnie 1991	5,004,361	Apr. 2,
Corain et al. 14, 1989 (Corain)(France) <sup>1</sup>	2,621,262	Jul.

The following rejections, found in the examiner's answer (Paper No. 17), are before us for review.

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<sup>1</sup> Our understanding of this foreign language document is derived from a reading of a translation thereof prepared in the United States Patent and Trademark Office. A copy of the translation is appended to this opinion.

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Claims 4 through 6 and 8 through 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Corain in view of Nicholas.

Claims 4 through 6 and 8 through 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Winnie in view of Nicholas, further in view of Vinciguerra.

The full text of the examiner's rejections and response to the argument presented by appellant appears in the answer (Paper No. 17), while the complete statement of appellant's argument can be found in the main and reply briefs (Paper Nos. 16 and 18).

In the main brief (page 15), as corroborated on page 2 of the reply brief, appellant groups independent claim 4 and dependent claims 5, 6, 8, and 9 as a first group, and dependent claim 10 as a second group.

OPINION

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In reaching our conclusion on the obviousness issues raised in this appeal, this panel of the board has carefully considered appellants' specification, drawing Figures 1 through 5, independent claim 4, the applied references,<sup>2</sup> and the respective viewpoints of appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We reverse the examiner's respective rejections of appellant's claims under 35 U.S.C. § 103.

Claim 4, the sole independent claim, addresses a connector rod for a loom, with the connector rod comprising, inter alia, forked rod ends, each forked rod end comprising a conical wall surrounding a countersunk conical recess, the

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<sup>2</sup> In our evaluation of the documents relied upon, we have considered all of the disclosure of each reference for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Additionally, this panel of the board has taken into account not only the specific teachings, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. See In re Preda 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

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conical wall comprising an open bottom including a deformable single line edge (4), and a torque resistant engagement between the deformable single line edge (4B) of the conical wall (4A) of the conical recess and a female threaded nut (1), the torque resistant engagement comprising as an integral part of the female threaded nut serrations (11) having a plurality of line ridges that deform

the deformable single line edge (4B) for holding the nut against rotation and against unintended axial withdrawal.

Of particular importance to appellant's overall invention, and clearly an express requirement of the claimed connector rod for a loom, is the coaction between a deformable single line edge and serrations to effect a torque resistant engagement for holding a nut against rotation and against unintended axial withdrawal.

When we set aside in our minds what appellant has taught us in the present application, and consider only the evidence of obviousness as a whole, it is at once apparent to us that

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the now claimed invention would not have been obvious to one having ordinary skill in the art on the basis of the applied prior art. The evidence before us simply fails to be suggestive of the interrelationship between a deformable single line edge and serrations to hold a nut against rotation and against unintended axial withdrawal in a connector rod for a loom, as now claimed.

As to connector rods for looms, the Corain and Vinciguerra documents reveal the respective use of a washer, knurling, and elastic flexible flanges to inhibit nut rotation, notwithstanding the obvious presence in each of these documents of what would have been understood to be an edge of a conical wall capable of being deformed. As to the Winnie reference, we find that it likewise lacks any suggestion for an interrelationship between a deformable single line edge and serrations to hold a nut against rotation and against unintended axial withdrawal.

The patent to Nicholas addresses a sheet metal nut and a threaded screw member within the bore of a supporting part to

secure the part and a plate together (Fig. 3). Fin-shaped projections 8, with free edge 9, are pressed from the material of the base 6 and shank 7 of the sheet metal nut (Figs. 3, 5, and 6). As explained by the patentee (page 1, column 2, lines 29 through 35),

[w]hen the screw member is tightened in engagement with the nut, the projections 8 will be drawn into the support 2 (Fig. 3) and any rotation of the nut will be prevented, and after the nut and screw are in final engagement the projections embedded in the support will aid in preventing the nut from becoming unloosened.

Considering the Nicholas disclosure as a whole, and in conjunction with the other applied prior art, it is clear to us that the teaching thereof would not have been suggestive of an interrelationship between a deformable single line edge and serrations to hold a nut against rotation and against unintended axial withdrawal, particularly in a connector rod for a loom, as now claimed, wherein conical surfaces are present and interact with one another.

While we have assessed the evidence of obviousness in its

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entirety, as above, and fully taken into account the point of view of the examiner as expressed in the answer, for the reasons articulated herein we are constrained to conclude that the evidence before us simply does not support a conclusion of obviousness.

In summary, this panel of the board has:

reversed the rejection of claims 4 through 6 and 8 through 10 under 35 U.S.C. § 103 as being unpatentable over Corain in view of Nicholas; and

reversed the rejection of claims 4 through 6 and 8 through 10 under 35 U.S.C. § 103 as being unpatentable over Winnie in view of Nicholas and Vinciguerra.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED



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IRWIN CHARLES COHEN	)	)
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JOHN P. MCQUADE	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
JOHN F. GONZALES	)	
Administrative Patent Judge	)	

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